

Attorney Docket No. E3697-00044

REMARKS

The Office Action mailed December 22, 2008 set an initial three month period for response. Accordingly, a Response may be timely filed with a three month Extension of Time up to and including June 22, 2009.

*Amendments to The Claims*

Claims 69 to 101 have been cancelled without prejudice to expedite prosecution. Applicants reserve their rights to pursue the subject matter of the cancelled claims in this and other related applications, such as continuing applications and divisional applications.

New claims 102 to 121 have been added and are directed to certain aspects of Applicants' invention. Applicants submit that these claims are clearly supported by the application and originally filed claims and give rise to no issue of new matter. In particular, for new claims 102 to 121, see, for example, pages 2 to 3, (¶ 0017 and 0018); page 3 (¶ 0026 to 0028, 0029 to 0031); page 3 to page 4 (¶ 0153 – 0165); pages 18 to 20 (¶ 0153 to 0165); and page 21 (¶ 0168) (which corresponds to this application).

*The Restriction Requirement*

Applicants note the Examiner's comments on his restriction requirement. Applicants reiterate their previous traverse of the Examiner's restriction requirement.

Applicants note that claims 84 and 85, withdrawn by the Examiner, have been cancelled.

With respect to the Examiner's comment on withdrawing any sequence other than SEQ ID NO:S 1 and 12 from consideration, Applicants note that SEQ ID NO:S 2 and 3 are also connexin 43 antisense compounds. Applicants submit that they are properly considered with SEQ ID NO:S 1 and 12. In any case, Applicants request that those sequences be rejoined upon a finding of allowable species.

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*The Obviousness-Type Double Patenting Rejections***A. Provisional Double Patenting Rejections**

The Examiner has made a number of provisional "obviousness-type" double patenting rejections over one or more of copending applications Serial Nos. 11/510,280; 11/510,498; 11/512,725; 11/512,730; and 11/512,735.

(i) USSN 11/510,280

Claims 73 to 78, 80, 81 and 98 to 101 were provisionally rejected over Claims 37 to 119 of copending USSN 11/510,280.

(ii) USSN 11/510,498

Claims 73 to 78, 80, 81 and 98 to 101 were provisionally rejected over Claims 37 to 189 (sic) of copending USSN 11/510,498.

(iii) USSN 11/512,725

Claims 69 to 73, 77 to 80 and 86 to 90 were provisionally rejected over claims 37 to 44 of copending USSN 11/512,725.

(iv) USSN 11/512,730

Claims 69 to 73, 77 to 80 and 86 to 90 were provisionally rejected over claims 37 to 70 of copending 11/512,730.

(v) USSN 11/512,735

Claims 69 to 73, 77 to 80 and 86 to 90 were provisionally rejected over claims 37 to 72 of co-pending USSN 11/512,735.

**B. Double Patenting Rejection**

Claims 73 to 78, 80, 81 and 98 to 101 were rejected for alleged "obviousness-type" double patenting over claims 1 to 70 of United States Patent No. 7,098,190 ("The '190 patent").

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**C. Summary**

Applicants note that the claims which were subject to the provisional "obviousness-type" double patenting and the "obviousness-type" double patenting rejection have been cancelled.

The cancellation of these claims is not an admission with regard to the merits of those rejections. Applicants have added new claims 102 to 121 which are focused on the eye-related aspects of their invention as they relate to trauma, including trauma from chemical and mechanical injuries as provided in the specification. Applicants submit that these new claims are free of potential any double patenting considerations.

***The Section 102(e) Rejections*****A. Becker et al. US 20070060538**

Claims 73 to 78, 80, 81 and 98 to 101 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Becker *et al.*, published U.S. Patent Application US 20070060538. The claims in this published patent application, which claims priority from the application that issued as U.S. Patent No. 7,098,190, refer to "reducing or delaying migration of neutrophils to a wound site."

**B. Becker et al. US 20080221051**

Claims 73 to 78, 80, 81 and 98 to 101 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Becker *et al.*, published U.S. Patent Application US 20080221051. The claims in this published patent application – which also claims priority from the application that issued as U.S. Patent No. 7,098,190 – refer to "decreasing lesion spread in tissue of a subject."

**C. Becker et al. US 20080249041**

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Claims 69 to 81 and 98 to 100 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Becker *et al.*, published U.S. Patent Application US 20080249041. The claims in this published patent application – which also claims priority from the application that issued as U.S. Patent No. 7,098,190 – refer to treating a subject having a wound by administering an effective amount of a connexin 31.1 antisense polynucleotide.

**D. Becker et al. US 20070072819**

Claims 69 to 81 and 98 to 100 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Becker *et al.*, published U.S. Patent Application US 20070072819. The claims in this published patent application – which also claims priority from the application that issued as U.S. Patent No. 7,098,190 – refer to treating a subject having a wound by administering an effective amount of a connexin 32 antisense polynucleotide

**E. Becker et al. US 20070072820**

Claims 69 to 81 and 98 to 100 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Becker *et al.*, published U.S. Patent Application US 20070072820. This rejection is found twice in the Office Action, first at pages 14-15 and again at pages 15-16. The claims in this published patent application – which also claims priority from the application that issued as U.S. Patent No. 7,098,190 – refer to treating a subject having a wound by administering an effective amount of a connexin 26 antisense polynucleotide.

**F. U.S. Patent No. 7,098,190**

Claims 69 to 81 and 98 to 100 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 7,098,190 to Becker *et al.* This patent includes 70 claims, including claims referring to methods for treating a human subject having a wound by

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administering a connexin 43 anti-sense polynucleotide for modulation of connexin 43 protein expression.

**G. Summary**

Applicants note that in view of the cancellation of claims 69 to 101, they need not deal further with these rejections. Cancellation of these claims, furthermore, may not be considered an admission as to the potential merit of those rejections, which are traversed in their entirety.

Applicants submit that new claims 102 to 121 relating to treating a subject for a penetrating eye trauma by administering a composition comprising a connexin 43-downregulating amount of a connexin 43 antisense compound clearly distinguish over the cited Becker *et al.* applications, including US 20080249041, US 20070072819 and US20070072820 which relate to connexins 31, 1, 32 and 26, respectively, and the '190 patent.

***The Section 102(b) Rejection***

Claims 77, 78, 80, 81 and 91 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Qui *et al.* Current Biology Volume 13:169-1703 (2003) ("Qui, *et al.*"). In support of his rejection, the Examiner asserts that Qui *et al.* "disclose the administration of connexin 43 antisense compounds to treat incision wounds in a mouse model."

Applicants note that rejected claims 77, 78, 80, 81, and 91 have been cancelled. While cancellation of these claims may not be considered an admission as to the potential merit of the rejections, which is traversed in its entirety, the rejections are thus moot. In any event, Qui *et al.* makes no mention of the subjects of new claims 102-121, treating a patient for a penetrating eye trauma by administering a composition comprising a connexin 43 antisense compound. Of course, an alleged reference can anticipate an invention only if "all limitations of the claim are found in the reference, or 'fully met' by it." *Kalman v. Kimberly-Clark Corp.*, 218 USPQ 781,

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789 (Fed. Cir. 1983). As a matter of law, therefore, Applicants' claims 102-121 cannot be anticipated by Qui *et al.*

***The Section 103 Rejections***

Claims 81 to 83 and 86 to 101 were rejected for alleged obviousness under 35 U.S.C. § 103(a) over the '190 patent, and the Becker et al published U.S. Patent Applications US 20080221051; US 20080249041; US 20070072819; US 20070072820; and US 20070060538; and Qui, *et al.*

Applicants note that the rejected claims have been cancelled. Accordingly, Applicants submit that they need not deal further with these rejections. Moreover, the cancellation of these claims should not be construed as any admission to the potential merit of these rejections.

Applicants submit that new claims 102 to 121 relating to treatment of a subject with a penetrating eye trauma by administering a composition comprising a connexin 43-downregulating amount of a connexin 43 antisense compound are neither suggested, nor made obvious, by the '190 patent and/or the Becker *et al.* published U.S. Patent Applications (all of which depend from the application that led to the '190 patent), alone or in conjunction with the Qui *et al.* mouse skin incision model paper.

**CONCLUSION**

For the reasons described and supported above, Applicants respectfully submit that they have dealt with all the outstanding rejections. Applicants submit that new claims 102 to 125 comprise allowable subject matter.

If the Examiner has any questions or believes a telephonic interview would expedite prosecution and allowance of this application, he is encouraged to telephone the undersigned Applicants' attorney at (619) 744-2210.

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The Commissioner is hereby authorized to charge the requisite fees, or any fees in connection with this application during its entire pendency, or to credit any overpayment, to Deposit Account No. 04-1679.

Respectfully submitted,

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